

May 10, 2017



U.S. Department
of Transportation

East Building, PHH-30
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 11990
(TWELFTH REVISION)

EXPIRATION DATE: 2021-04-30

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Norris Cylinder Company
Huntsville, AL
2. PURPOSE AND LIMITATIONS:
 - a. This special permit authorizes the manufacture, mark, sale and use of non-DOT specification oil well sampling cylinders conforming with all regulations applicable to a DOT Specification 3A cylinder, except as specified herein, for the transportation in commerce of the materials authorized by this special permit. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
 - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.201, 173.202, 173.203, 173.302a and 173.304a in that a non-DOT specification cylinder is not authorized, except as specified herein.
5. BASIS: This special permit is based on the application of Norris Cylinder Company dated March 9, 2017, submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

| Hazardous Materials Description | | | |
|---|------------------------|-----------------------|---------------|
| Proper Shipping Name | Hazard Class/ Division | Identification Number | Packing Group |
| Compressed gas, flammable, n.o.s. | 2.1 | UN1954 | N/A |
| Helium, compressed | 2.2 | UN1046 | N/A |
| Hydrocarbon gas mixture, compressed, n.o.s. | 2.1 | UN1964 | N/A |
| Hydrocarbon gas mixture, liquefied, n.o.s. | 2.1 | UN1965 | N/A |
| Liquefied gas, flammable, n.o.s. | 2.1 | UN3161 | N/A |
| Methane, compressed or Natural gas, compressed (<i>with high methane content</i>) | 2.1 | UN1971 | N/A |
| Nitrogen, compressed | 2.2 | UN1066 | N/A |
| Petroleum crude oil | 3 | UN1267 | I, II, or III |
| Petroleum gases, liquefied or Liquefied petroleum gas | 2.1 | UN1075 | N/A |

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a non-DOT specification oil well sampling cylinder, constructed from seamless stainless steel tubing, with a flanged flat head threaded end closure at one end. The other end is a machined flat head as an integral part of the cylinder. Each cylinder must comply with Taylor-Wharton Coyne drawings submitted with the original application or Taylor-Wharton Coyne drawing numbers 5860424-00, Rev.2, 586042-01, Rev.2, 586042-02, and 586042-03 on file with the Office of

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Hazardous Materials Safety Approvals and Permits Division
(OHMSAPD), § 178.35, and with DOT 3A specification
(§ 178.36) except as follows:

§ 178.35(e) *Safety devices*

No pressure relief device is required on the completed cylinder. Cylinder must be equipped with elastomeric seals that relieve pressure when subjected to a pool fire.

§ 178.35(f) *Markings*

(1) * * *

(i) Cylinders must be marked "DOT-SP 11990" in lieu of "DOT-3A" followed by the service pressure (see paragraph 8.h. for an alternative).

* * *

§ 178.36(a) *Type, size, and service pressure*

The maximum water capacity must not exceed 1,200 cc. The maximum service pressure must not exceed 20,000 psig.

§ 178.36(b) *Steel*

Armco 17-4PH stainless steel double heat treated at 1150°F. Material must meet the requirements of the National Association of Corrosion Engineers (NACE) Specification MR-01-75 for suitability in hydrogen sulfide (H₂S) service.

§ 178.36(f) *Wall thickness*

The minimum wall thickness must be 0.870 inch. * * *

§ 178.36(g) *Heat treatment*

No heat treatment is required for the completed cylinder.

§ 178.36(j) *Flattening test*

The flattening test is not required.

May 10, 2017§ 178.36(1) *Acceptable results for physical tests*

| | |
|---------------------------|------------------------------|
| Minimum Tensile strength: | 120,000 psi |
| Minimum Yield strength: | 100,000 psi |
| Elongation: | 20% on 2 inch gauge specimen |

b. TESTING - Each cylinder must be reinspected and hydrostatically retested in accordance with § 180.209 as prescribed for DOT 3A specification cylinders. Reheat treatment or repair of rejected cylinders is not permitted.

c. OPERATIONAL CONTROLS - Each cylinder must be overpacked for shipment in accordance with § 173.301(a) (9).

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modification or change is made to the package and it is offered for transportation in conformance with this special permit and the HMR.

c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this special permit must be either

(1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured, or

(2) marked with a registration symbol designated by the Office of Hazardous Materials Safety Approvals and Permits Division for a specific manufacturing facility.

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- e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.
- f. The cylinders are authorized for oil well sampling service only.
- g. Transportation of Division 2.1 materials (flammable gases) are not authorized aboard cargo vessel or aircraft unless specifically authorized in the Hazardous Materials Table (§ 172.101).
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, and cargo only aircraft.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or aircraft used to transport packages covered by this special permit. The shipper must furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

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No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous materials incidents, and 171.16 Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for William Schoonover
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: Teresa D'Onfro